

Abstract

A video signal is decomposed into a higher brightness level signal and a lower brightness level signal. The threshold between higher and lower brightness levels is adjustable and related to the transition between lower and higher gain portions of the gamma table for an associated liquid crystal imager. The lower brightness level signal is low pass filtered to reduce the difference in brightness between adjacent pixels. The higher brightness level signal is delayed in time to match the processing delay through the low pass filter. The delay matched signal and the low pass filtered signal are combined to form a modified video signal less likely to result in sparkle artifacts in the imager. Sparkle reduction processing can be applied to luminance signals and to video drive signals in various combinations, based on independently selectable thresholds.